OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/965,529

DATE: 11/14/2001
TIME: 09:52:53

Input Set : A:\PTO.MBH.txt
Output Set: N:\CRF3\11142001\I965529.raw

ENTERED

p-5

```
      2 <110> APPLICANT: LAL, Preeti
      3       YUE, Henry
      4       TANG, Y. Tom
      5       BANDMAN, Olga
      6       BURFORD, Neil
      7       AZIMZAI, Yalda
      8       BAUGHN, Mariah R.
      9       LU, Dyung Aina M.
     10       PATTERSON, Chandra
W--> 11 <120> TITLE OF INVENTION: MEMBRANE ASSOCIATED PROTEINS
W--> 12 <130> FILE REFERENCE: PF-0731 USA
W--> 13 <140> CURRENT APPLICATION NUMBER: To Be Assigned
C--> 14 <141> CURRENT FILING DATE: 2001-09-26
     15 <150> PRIOR APPLICATION NUMBER: 60/149,641
     16 <151> PRIOR FILING DATE: 1999-08-17
     17 <150> PRIOR APPLICATION NUMBER: 60/164,203
     18 <151> PRIOR FILING DATE: 1999-11-09
     19 <150> PRIOR APPLICATION NUMBER: PCT/US00/22315
     20 <151> PRIOR FILING DATE: 2000-08-14
W--> 21 <160> NUMBER OF SEQ ID: 74
     22 <170> SOFTWARE: PERL Program
W--> 23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 351
     25 <212> TYPE: PRT
     26 <213> ORGANISM: Homo sapiens
W--> 27 <220> FEATURE:
     28 <221> NAME/KEY: misc_feature
     29 <223> OTHER INFORMATION: Incyte ID No: 112301CD1
W--> 30 <400> SEQUENCE: 1
     31 Met Thr Leu Arg Leu Leu Glu Asp Trp Cys Arg Gly Met Asp Met
     32   1               5                  10                  15
     33 Asn Pro Arg Lys Ala Leu Leu Ile Ala Gly Ile Ser Gln Ser Cys
     34               20                  25                  30
     35 Ser Val Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro
     36               35                  40                  45
     37 Leu Gly Glu Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu
     38               50                  55                  60
     39 Asn Arg Lys Val Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His
     40               65                  70                  75
     41 Ala Leu Val Pro Lys Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg
     42               80                  85                  90
     43 Val Ile Phe Lys Pro Pro Asp Pro Asp Asn Thr Phe Leu Ser Arg
     44               95                 100                 105
     45 Leu Asn Glu Phe Leu Ala Gly Glu Gly Met Thr Val Gly Glu Leu
     46              110                 115                 120
     47 Ser Arg Ala Leu Gly His Glu Asn Gly Ser Leu Asp Pro Glu Gln
     48              125                 130                 135
```

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```
 49 Gly Met Ile Pro Glu Met Trp Ala Pro Met Leu Ala Gln Ala Leu
 50                 140                 145                 150
 51 Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu Lys Tyr Lys Lys Leu
 52                 155                 160                 165
 53 Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro Gly Glu Glu Glu
 54                 170                 175                 180
 55 Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile Lys Ala Trp
 56                 185                 190                 195
 57 Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu Ser Leu
 58                 200                 205                 210
 59 Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn Asn
 60                 215                 220                 225
 61 Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
 62                 230                 235                 240
 63 Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu
 64                 245                 250                 255
 65 Thr Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu
 66                 260                 265                 270
 67 Arg Leu Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile
 68                 275                 280                 285
 69 Glu Arg Asp Ala Val Asn Gln Ala Arg Leu Asp Gln Val Ile Ala
 70                 290                 295                 300
 71 Gly Ala Val His Lys Thr Ile Arg Arg Glu Leu Asn Leu Pro Glu
 72                 305                 310                 315
 73 Asp Gly Pro Ala Pro Gly Phe Leu Gln Leu Leu Val Leu Ile Lys
 74                 320                 325                 330
 75 Asp Tyr Glu Ala Ala Glu Glu Glu Glu Ala Leu Leu Gln Ala Ile
 76                 335                 340                 345
 77 Leu Glu Gly Asn Phe Thr
 78                 350
 79 <210> SEQ ID NO: 2
 80 <211> LENGTH: 458
 81 <212> TYPE: PRT
 82 <213> ORGANISM: Homo sapiens
W--> 83 <220> FEATURE:
 84 <221> NAME/KEY: misc_feature
 85 <223> OTHER INFORMATION: Incyte ID No: 997947CD1
W--> 86 <400> SEQUENCE: 2
 87 Met Gln Ala Thr Ser Asn Leu Leu Asn Leu Leu Leu Leu Ser Leu
 88   1               5                  10                  15
 89 Phe Ala Gly Leu Asp Pro Ser Lys Thr Gln Ile Ser Pro Lys Glu
 90                  20                  25                  30
 91 Gly Trp Gln Val Tyr Ser Ser Ala Gln Asp Pro Asp Gly Arg Cys
 92                  35                  40                  45
 93 Ile Cys Thr Val Val Ala Pro Glu Gln Asn Leu Cys Ser Arg Asp
 94                  50                  55                  60
 95 Ala Lys Ser Arg Gln Leu Arg Gln Leu Leu Glu Lys Val Gln Asn
 96                  65                  70                  75
 97 Met Ser Gln Ser Ile Glu Val Leu Asn Leu Arg Thr Gln Arg Asp
```

RAW SEQUENCE LISTING DATE: 11/14/2001
PATENT APPLICATION: US/09/965,529 TIME: 09:52:53

Input Set : A:\PTO.MBH.txt
Output Set: N:\CRF3\11142001\I965529.raw

```
98                  80                  85                  90
99 Phe Gln Tyr Val Leu Lys Met Glu Thr Gln Met Lys Gly Leu Lys
100                  95                 100                 105
101 Ala Lys Phe Arg Gln Ile Glu Asp Asp Arg Lys Thr Leu Met Thr
102                 110                 115                 120
103 Lys His Phe Gln Glu Leu Lys Glu Lys Met Asp Glu Leu Leu Pro
104                 125                 130                 135
105 Leu Ile Pro Val Leu Glu Gln Tyr Lys Thr Asp Ala Lys Leu Ile
106                 140                 145                 150
107 Thr Gln Phe Lys Glu Glu Ile Arg Asn Leu Ser Ala Val Leu Thr
108                 155                 160                 165
109 Gly Ile Gln Glu Glu Ile Gly Ala Tyr Asp Tyr Glu Glu Leu His
110                 170                 175                 180
111 Gln Arg Val Leu Ser Leu Glu Thr Arg Leu Arg Asp Cys Met Lys
112                 185                 190                 195
113 Lys Leu Thr Cys Gly Lys Leu Met Lys Ile Thr Gly Pro Val Thr
114                 200                 205                 210
115 Val Lys Thr Ser Gly Thr Arg Phe Gly Ala Trp Met Thr Asp Pro
116                 215                 220                 225
117 Leu Ala Ser Glu Lys Asn Asn Arg Val Trp Tyr Met Asp Ser Tyr
118                 230                 235                 240
119 Thr Asn Asn Lys Ile Val Arg Glu Tyr Lys Ser Ile Ala Asp Phe
120                 245                 250                 255
121 Val Ser Gly Ala Glu Ser Arg Thr Tyr Asn Leu Pro Phe Lys Trp
122                 260                 265                 270
123 Ala Gly Thr Asn His Val Val Tyr Asn Gly Ser Leu Tyr Phe Asn
124                 275                 280                 285
125 Lys Tyr Gln Ser Asn Ile Ile Ile Lys Tyr Ser Phe Asp Met Gly
126                 290                 295                 300
127 Arg Val Leu Ala Gln Arg Ser Leu Glu Tyr Ala Gly Phe His Asn
128                 305                 310                 315
129 Val Tyr Pro Tyr Thr Trp Gly Gly Phe Ser Asp Ile Asp Leu Met
130                 320                 325                 330
131 Ala Asp Glu Ile Gly Leu Trp Ala Val Tyr Ala Thr Asn Gln Asn
132                 335                 340                 345
133 Ala Gly Asn Ile Val Ile Ser Gln Leu Asn Gln Asp Thr Leu Glu
134                 350                 355                 360
135 Val Met Lys Ser Trp Ser Thr Gly Tyr Pro Lys Arg Ser Ala Gly
136                 365                 370                 375
137 Glu Ser Phe Met Ile Cys Gly Thr Leu Tyr Val Thr Asn Ser His
138                 380                 385                 390
139 Leu Thr Gly Ala Lys Val Tyr Tyr Ser Tyr Ser Thr Lys Thr Ser
140                 395                 400                 405
141 Thr Tyr Glu Tyr Thr Asp Ile Pro Phe His Asn Gln Tyr Phe His
142                 410                 415                 420
143 Ile Ser Met Leu Asp Tyr Asn Ala Arg Asp Arg Ala Leu Tyr Ala
144                 425                 430                 435
145 Trp Asn Asn Gly His Gln Val Leu Phe Asn Val Thr Leu Phe His
146                 440                 445                 450
```

RAW SEQUENCE LISTING DATE: 11/14/2001
PATENT APPLICATION: **US/09/965,529** TIME: 09:52:53

Input Set : **A:\PTO.MBH.txt**
Output Set: **N:\CRF3\11142001\I965529.raw**

147 Ile Ile Lys Thr Glu Asp Asp Thr
148 455
149 <210> SEQ ID NO: 3
150 <211> LENGTH: 219
151 <212> TYPE: PRT
152 <213> ORGANISM: Homo sapiens
W--> 153 **<220> FEATURE:**
154 <221> NAME/KEY: misc_feature
155 <223> OTHER INFORMATION: Incyte ID No: 1521513CD1
W--> 156 **<400> SEQUENCE: 3**
157 Met Asn Ser Ser Lys Ser Ser Glu Thr Gln Cys Thr Glu Arg Gly
158 1 5 10 15
159 Cys Phe Ser Ser Gln Met Phe Leu Trp Thr Val Ala Gly Ile Pro
160 20 25 30
161 Ile Leu Phe Leu Ser Ala Cys Phe Ile Thr Arg Cys Val Val Thr
162 35 40 45
163 Phe Arg Ile Phe Gln Thr Cys Asp Glu Lys Lys Phe Gln Leu Pro
164 50 55 60
165 Glu Asn Phe Thr Glu Leu Ser Cys Tyr Asn Tyr Gly Ser Gly Ser
166 65 70 75
167 Val Lys Asn Cys Cys Pro Leu Asn Trp Glu Tyr Phe Gln Ser Ser
168 80 85 90
169 Cys Tyr Phe Phe Ser Thr Asp Thr Ile Ser Trp Ala Leu Ser Leu
170 95 100 105
171 Lys Asn Cys Ser Ala Met Gly Ala His Leu Val Val Ile Asn Ser
172 110 115 120
173 Gln Glu Glu Gln Glu Phe Leu Ser Tyr Lys Lys Pro Lys Met Arg
174 125 130 135
175 Glu Phe Phe Ile Gly Leu Ser Asp Gln Val Val Glu Gly Gln Trp
176 140 145 150
177 Gln Trp Val Asp Gly Thr Pro Leu Thr Lys Ser Leu Ser Phe Trp
178 155 160 165
179 Asp Val Gly Glu Pro Asn Asn Ile Ala Thr Leu Glu Asp Cys Ala
180 170 175 180
181 Thr Met Arg Asp Ser Ser Asn Pro Arg Gln Asn Trp Asn Asp Val
182 185 190 195
183 Thr Cys Phe Leu Asn Tyr Phe Arg Ile Cys Glu Met Val Gly Ile
184 200 205 210
185 Asn Pro Leu Asn Lys Gly Lys Ser Leu
186 215
187 <210> SEQ ID NO: 4
188 <211> LENGTH: 276
189 <212> TYPE: PRT
190 <213> ORGANISM: Homo sapiens
W--> 191 **<220> FEATURE:**
192 <221> NAME/KEY: misc_feature
193 <223> OTHER INFORMATION: Incyte ID No: 1863994CD1
W--> 194 **<400> SEQUENCE: 4**
195 Met Glu Ser Arg Met Trp Pro Ala Leu Leu Leu Ser His Leu Leu

RAW SEQUENCE LISTING DATE: 11/14/2001
PATENT APPLICATION: **US/09/965,529** TIME: 09:52:53

Input Set : **A:\PTO.MBH.txt**
Output Set: **N:\CRF3\11142001\I965529.raw**

```
196   1               5                  10                  15
197 Pro Leu Trp Pro Leu Leu Leu Leu Pro Leu Pro Pro Pro Ala Gln
198                  20                  25                  30
199 Gly Ser Ser Ser Ser Pro Arg Thr Pro Pro Ala Pro Ala Arg Pro
200                  35                  40                  45
201 Pro Cys Ala Arg Gly Gly Pro Ser Ala Pro Arg His Val Cys Val
202                  50                  55                  60
203 Trp Glu Arg Ala Pro Pro Pro Ser Arg Ser Pro Arg Val Pro Arg
204                  65                  70                  75
205 Ser Arg Arg Gln Val Leu Pro Gly Thr Ala Pro Pro Ala Thr Pro
206                  80                  85                  90
207 Ser Gly Phe Glu Glu Gly Pro Pro Ser Ser Gln Tyr Pro Trp Ala
208                  95                 100                 105
209 Ile Val Trp Gly Pro Thr Val Ser Arg Glu Asp Gly Gly Asp Pro
210                 110                 115                 120
211 Asn Ser Ala Asn Pro Gly Phe Leu Asp Tyr Gly Phe Ala Ala Pro
212                 125                 130                 135
213 His Gly Leu Ala Thr Pro His Pro Asn Ser Asp Ser Met Arg Gly
214                 140                 145                 150
215 Asp Gly Asp Gly Leu Ile Leu Gly Glu Ala Pro Ala Thr Leu Arg
216                 155                 160                 165
217 Pro Phe Leu Phe Gly Gly Arg Gly Glu Gly Val Asp Pro Gln Leu
218                 170                 175                 180
219 Tyr Val Thr Ile Thr Ile Ser Ile Ile Ile Val Leu Val Ala Thr
220                 185                 190                 195
221 Gly Ile Ile Phe Lys Phe Cys Trp Asp Arg Ser Gln Lys Arg Arg
222                 200                 205                 210
223 Arg Pro Ser Gly Gln Gln Gly Ala Leu Arg Gln Glu Glu Ser Gln
224                 215                 220                 225
225 Gln Pro Leu Thr Asp Leu Ser Pro Ala Gly Val Thr Val Leu Gly
226                 230                 235                 240
227 Ala Phe Gly Asp Ser Pro Thr Pro Thr Pro Asp His Glu Glu Pro
228                 245                 250                 255
229 Arg Gly Gly Pro Arg Pro Gly Met Pro His Pro Lys Gly Ala Pro
230                 260                 265                 270
231 Ala Phe Gln Leu Asn Arg
232                 275
233 <210> SEQ ID NO: 5
234 <211> LENGTH: 375
235 <212> TYPE: PRT
236 <213> ORGANISM: Homo sapiens
W--> 237 <220> FEATURE:
238 <221> NAME/KEY: misc_feature
239 <223> OTHER INFORMATION: Incyte ID No: 2071941CD1
W--> 240 <400> SEQUENCE: 5
241 Met Ser Ser His Lys Gly Ser Val Val Ala Gln Gly Asn Gly Ala
242   1               5                  10                  15
243 Pro Ala Ser Asn Arg Glu Ala Asp Thr Val Glu Leu Ala Glu Leu
244                  20                  25                  30
```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/965,529

DATE: 11/14/2001
TIME: 09:52:54

Input Set : A:\PTO.MBH.txt
Output Set: N:\CRF3\11142001\I965529.raw

L:11 M:283 W: Missing Blank Line separator, <120> field identifier
L:12 M:283 W: Missing Blank Line separator, <130> field identifier
L:13 M:283 W: Missing Blank Line separator, <140> field identifier
L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:21 M:283 W: Missing Blank Line separator, <160> field identifier
L:23 M:283 W: Missing Blank Line separator, <210> field identifier
L:27 M:283 W: Missing Blank Line separator, <220> field identifier
L:30 M:283 W: Missing Blank Line separator, <400> field identifier
L:83 M:283 W: Missing Blank Line separator, <220> field identifier
L:86 M:283 W: Missing Blank Line separator, <400> field identifier
L:153 M:283 W: Missing Blank Line separator, <220> field identifier
L:156 M:283 W: Missing Blank Line separator, <400> field identifier
L:191 M:283 W: Missing Blank Line separator, <220> field identifier
L:194 M:283 W: Missing Blank Line separator, <400> field identifier
L:237 M:283 W: Missing Blank Line separator, <220> field identifier
L:240 M:283 W: Missing Blank Line separator, <400> field identifier
L:295 M:283 W: Missing Blank Line separator, <220> field identifier
L:298 M:283 W: Missing Blank Line separator, <400> field identifier
L:337 M:283 W: Missing Blank Line separator, <220> field identifier
L:340 M:283 W: Missing Blank Line separator, <400> field identifier
L:393 M:283 W: Missing Blank Line separator, <220> field identifier
L:396 M:283 W: Missing Blank Line separator, <400> field identifier
L:427 M:283 W: Missing Blank Line separator, <220> field identifier
L:430 M:283 W: Missing Blank Line separator, <400> field identifier
L:479 M:283 W: Missing Blank Line separator, <220> field identifier
L:482 M:283 W: Missing Blank Line separator, <400> field identifier
L:533 M:283 W: Missing Blank Line separator, <220> field identifier
L:536 M:283 W: Missing Blank Line separator, <400> field identifier
L:625 M:283 W: Missing Blank Line separator, <220> field identifier
L:628 M:283 W: Missing Blank Line separator, <400> field identifier
L:699 M:283 W: Missing Blank Line separator, <220> field identifier
L:702 M:283 W: Missing Blank Line separator, <400> field identifier
L:785 M:283 W: Missing Blank Line separator, <220> field identifier
L:788 M:283 W: Missing Blank Line separator, <400> field identifier
L:855 M:283 W: Missing Blank Line separator, <220> field identifier
L:858 M:283 W: Missing Blank Line separator, <400> field identifier
L:901 M:283 W: Missing Blank Line separator, <220> field identifier
L:904 M:283 W: Missing Blank Line separator, <400> field identifier
L:997 M:283 W: Missing Blank Line separator, <220> field identifier
L:1000 M:283 W: Missing Blank Line separator, <400> field identifier
L:1061 M:283 W: Missing Blank Line separator, <220> field identifier
L:1064 M:283 W: Missing Blank Line separator, <400> field identifier
L:1109 M:283 W: Missing Blank Line separator, <220> field identifier
L:1112 M:283 W: Missing Blank Line separator, <400> field identifier
L:1169 M:283 W: Missing Blank Line separator, <220> field identifier
L:1172 M:283 W: Missing Blank Line separator, <400> field identifier
L:1235 M:283 W: Missing Blank Line separator, <220> field identifier

VERIFICATION SUMMARY DATE: 11/14/2001
PATENT APPLICATION: US/09/965,529 TIME: 09:52:54

Input Set : A:\PTO.MBH.txt
Output Set: N:\CRF3\11142001\I965529.raw

L:1238 M:283 W: Missing Blank Line separator, <400> field identifier
L:1305 M:283 W: Missing Blank Line separator, <220> field identifier
L:1308 M:283 W: Missing Blank Line separator, <400> field identifier
L:1345 M:283 W: Missing Blank Line separator, <220> field identifier
L:2268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:2269 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:2270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:3086 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:62

STATISTICS SUMMARY
PATENT APPLICATION: US/09/965,529

DATE: 11/14/2001
TIME: 09:52:54

Input Set : A:\PTO.MBH.txt
Output Set: N:\CRF3\11142001\I965529.raw

Application Serial Number: US/09/965,529
Alpha or Numeric: Numeric
Application Class:
Application File Date: 09-26-2001
Art Unit: OIPE
Software Application: Other
Total Number of Sequences: 74
Total Nucleotides: 64095
Total Amino Acids: 13483
Number of Errors: 0
Number of Warnings: 159
Number of Corrections: 2

MESSAGE SUMMARY

270 C: 1 (Current Application Number differs)
271 C: 1 (Current Filing Date differs)
283 W: 155 (Missing Blank Line separator)
341 W: 4 ((46) "n" or "Xaa" used)